Supplement S2: Categorization of supply shortage notifications and management.

	Category 1	Category 2	Category 3
Definition	Constrained supply of individual vaccine packaging sizes	Product supply shortage (all packaging sizes not deliverable), but an alternative vaccine is available for the same or similar indication	Product supply shortage, no alternative product available or the alternative product available is insufficient to cover the demand arising from the shortage
Action	Public notification of the shortage on PEI website including - expected duration of shortage	Public notification of the shortage on PEI website including - expected duration of shortage and - alternative products available (confirmation by MAH).	Public notification of the shortage on PEI website including - expected duration of shortage and - STIKO advice for medical prioritization and management - Newsletter to stakeholders
Stakeholder involvement	Notifying MAH, PEI	Notifying MAH, PEI, MAH with alternative products RKI/STIKO, if indications differ	Notifying MAH, PEI, MAH with alternative products, RKI/STIKO

MAH: Marketing authorization holders; PEI: Paul-Ehrlich-Institut, RKI: Robert-Koch-Institut; STIKO: German NITAG